
OWEN COUNTY

(Owen County Water Service Area Map)

- Estimated 1999 population of 10,200--67% on public water
- Estimated 2020 population of 11,800--92% on public water
- 165 miles of water lines, with plans for 320 additional miles
- Estimated funding needs for public water 2000-2005--\$3,160,000
- Estimated funding needs for public water 2006-2020--\$10,400,000

Owen County had an estimated population of 10,240 (4,230 households) in 1999 with a projected population of 11,800 (5,300 households) in 2020. Public water is provided to about 2/3 of the county's residents. In areas of the county not served by public water, about 1 of 5 households rely on private domestic wells and 4 of 5 on hauled water and other sources. About 1,330 customers will be added to public water service through new line extensions in 2000-2020.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	In \$1000	in \$1000	in \$1000	in \$1000	in \$1000
OWEN								-
Carroll Water Dist. #1	9.4	61	330					330
Tri-Village W/D	34.0	256	1,200					1,200
Carroll Co. W/D	94.0	61	330				1,300	1,630
Total	137.4	378	1,860				1,300	3,160

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
OWEN								-
Carroll Water Dist. #1	12.7	50	450					450
Tri-Village W/D	156.0	850	5,500					5,500
Carroll Co. W/D	12.7	50	450					450
Owenton					4,000			4,000
Total	181.4	950	6,400		4,000			10,400

PUBLIC WATER SYSTEMS

Owen County has 6 public or semi-public water systems: 4 community--1 municipal, Owenton Water Works; 1 water district, Tri-Village Water District; 2 private systems; and 2 non-community systems. Parts of the county are also served by Carroll County Water District #1, Georgetown Municipal Water, and Henry County Water District #2.

WATER SERVICE AREAS

OWEN COUNTY

Kentucky

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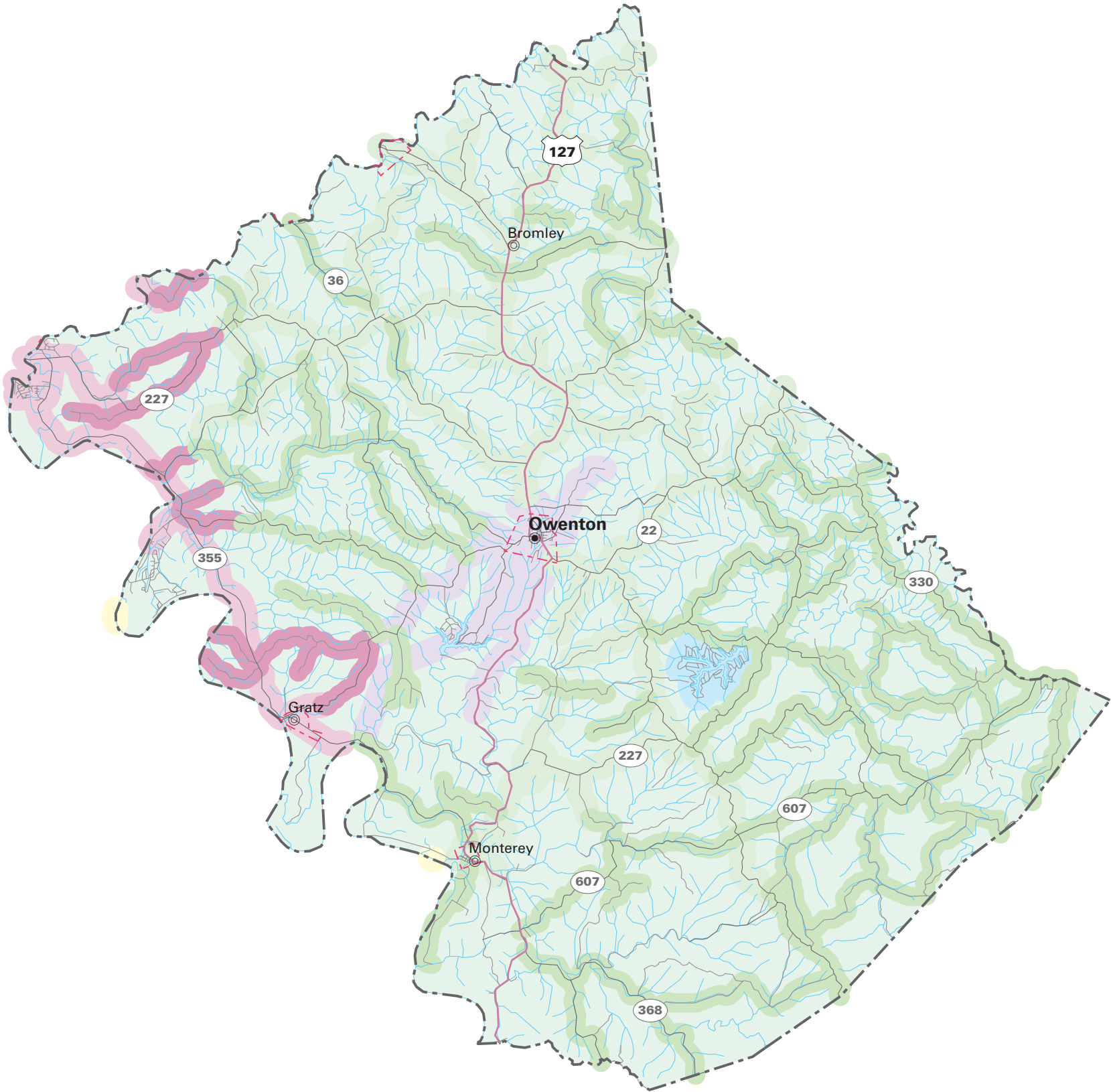
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WATER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		TRI-VILLAGE WATER DISTRICT
		OWENTON CITY WATER WORKS
		HENRY COUNTY WATER DISTRICT #2
		ELK LAKE WATER COMPANY
		CARROLL COUNTY WATER DISTRICT #1

OWENTON CITY WATER WORKS

PWSID: 0940337
System Type: COMMUNITY
Owner Type: MUNICIPAL
Surface Source: SEVERN CREEK
Purchase Source:
Well Source:
Sells Water to: TRI-VILLAGE WATER DISTRICT
Treatment Plant Capacity (MGD): 1.40
Percent Daily Average Production: 44.00
Total Tank Storage Capacity (gallons): 100,000.00
Total Service Connections: 1,060.00
Number of Employees: 9.00
Treatment Operator Class: 2D
Distribution Operator Class: 3A
Customer Rate for 1,000 Gallons: Not available
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons): Not available
Water Sold 1997 (gallons): Not available
Unaccounted-for Water 1997 (%): Not available

The Owenton Water Works draws its water from Severn Creek, which it then pumps into Lower Thomas Lake, from which it is then pumped to the water treatment plant. Owenton has 1,060 service connections serving a population of 4,300. It has 955 residential customers who used a total volume in 1998 of 132,975,600 gallons, 75 commercial customers who used 14,554,000 gallons, and 1 industrial customer who used 4,200,000 gallons. The average daily production of the Owenton Water Works water treatment plant was 500,000 gallons per day in 1997. They also supply wholesale water to Tri-Village Water District. There is a storage capacity of 500,000 gallons in 2 tanks. The Owenton Water Works has 9 full-time employees.

It is estimated that Owenton serves about 90 percent of its residents with city water. They anticipate significant population growth with the arrival of NASCAR generated business. They plan to move their intake on Severn Creek down to the Kentucky River, to avoid the inadequacy the current location would suffer during a drought. Owenton also plans double the capacity of their existing treatment plant in order to meet the demands of a growing population.

TRI-VILLAGE WATER DISTRICT

PWSID: 0940430
System Type: COMMUNITY
Owner Type: WATER DISTRICT
Surface Source:
Purchase Source: OWENTON WATER WORKS
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0.00
Percent Daily Average Production: 0.00
Total Tank Storage Capacity (gallons): 777,000.00
Total Service Connections: 1,400.00
Number of Employees: 5.00
Treatment Operator Class: 2D
Distribution Operator Class:
Customer Rate for 1,000 Gallons: 5.69
O/M costs 1997: 333,844.00
O/M costs per Service Connection: 237.11
Net Revenue 1997: 50,531.00
Total Water Produced 1997 (gallons): 0.00
Water Sold 1997 (gallons): 82,381,900.00
Unaccounted-for Water 1997 (%): 22.12

The Tri-Village Water District includes much of rural Owen County, and purchases its water from Owenton Water Works. The District has 1,400 service connections serving 1,260 customers in Owen County, 90 customers in Gallatin County, and 20 customers in Grant County. It has 1,304 residential customers using a total volume in 1998 of 76,379,000 gallons and 34 commercial customers who used 3,576,000 gallons. The average daily usage for the last twelve months was 398,000 gallons per day of a total available capacity of source of 500,000 gallons per day. The District has no treatment or pumping facilities. There is a storage capacity of 777,000 gallons in 7 tanks located throughout the District.

The general manager of the system indicates that 85 percent of the households in the district are already being served. However, serving Owen County is a daunting task, as it is rural, and the population relatively sparse. Some of the public roads are no longer maintained, so were not included in the preparation of this plan. Carroll County Water District No. 1 has annexed the southwest portion of Owen County into its service area, helping fill in the large geographic gaps in service. In addition, two developed communities in rural Owen County operate their own private water treatment facilities. Despite these factors, large areas of Owen County remain to be served. Approximately 28 miles of waterline extensions are

planned in southeastern Owen County with the next five years. Beyond these, much funding will be necessary to serve the remainder of the service area.

ELK LAKE WATER COMPANY

PWSID: 0940119
System Type: COMMUNITY
Owner Type: PRIVATE
Surface Source: ELK LAKE RESERVOIR
Purchase Source:
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0.15
Percent Daily Average Production: 15.00
Total Tank Storage Capacity (gallons): 100,000.00
Total Service Connections: 0.00
Number of Employees: 0.00
Treatment Operator Class: 1D
Distribution Operator Class: 2A
Customer Rate for 1,000 Gallons: 12.69
O/M costs 1997: 75,930.00
O/M costs per Service Connection: 232.91
Net Revenue 1997: 910.00
Total Water Produced 1997 (gallons): 9,688,000.00
Water Sold 1997 (gallons): 6,900,000.00
Unaccounted-for Water 1997 (%): 14.02

GLENWOOD HALL RESORT

Glenwood Hall Resort is located in Owen County. The system serves a population of 613 and has 186 service connections. The private, community system has treatment capacity of 288,000 gallons per day and storage capacity of 212,000 gallons. The water source is wells. The charge for the first 5000 gallons of water was \$54.94. The system produced 11,247,000 gallons and sold 6,603,000gal. for the period. Overall system losses were 36.85% for the same period.

OTHER SYSTEMS

BILLS PLACE

Bills Place is located in Owen County. The system serves a population of 40 and has 1 service connection. The private, transient, non-community system water source is Henry County Water District.

FAIRVIEW GROCERY & RESTAURANT

Fairview Grocery & Restaurant is located in Owen County. The system serves a population of 40 and has 1 service connection. The private, transient, non-community system water source is Henry County Water District.

PRIVATE DOMESTIC SYSTEMS:

About 3,200 residents of Owen County rely on private domestic water supplies: 600 on wells and 2,600 on hauled water and other sources.

In some of the bottoms of the Kentucky River and Eagle Creek, most drilled wells will produce enough water for a domestic supply at depths of less than 100 feet. Some wells located in the smaller creek valleys and in some less productive areas along the Kentucky River and Eagle Creek will produce enough water for a domestic supply except during dry weather. In the upland areas of Owen County that encompasses approximately 80% of the county, most drilled wells will not produce enough water for a dependable domestic supply except along drainage lines that may produce enough water except during dry weather. Ground water in these areas is hard or very hard and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet.
